

Amendments to the Specification:

Please replace the title with the following new title:

IMAGE ACQUISITION UNIT WITH HEATING DEVICE FOR MONITORING THE EXTERIOR OF A VEHICLE

Please add the following new paragraph after the Title and before the first paragraph on page 1:

This application is a U.S. National Phase Application of PCT International Application No. PCT/ES 03/00241, filed May 22, 2003.

Please replace the paragraph, beginning at page 3, line 9, with the following rewritten paragraph:

A simple way to incorporate said control means comprises providing an on-off switch to control the activation time of said supply current of the electrical heater. This on-off switch may be, for example, associated ~~with~~with a thermostat, for its automatic activation as a function of a local temperature in the image acquisition unit or at a vehicle's user disposal, for its voluntary activation as a function of a subjective appreciation of the user. In this second case, the on-off switch may be common for at least another heating device of the vehicle, as, for example, a rear window heating system and/or an exterior rear view mirror heating system. In this way, when the motor vehicle's user considers that the ambient or climatic conditions are adverse, by activating a single switch he may activate ~~of~~or deactivate the various systems ~~destinated~~designated to avoid lacking transparency problems in different elements of the motor vehicle.

Please replace the paragraph, beginning at page 3, line 22 with the following rewritten paragraph:

Another more complex embodiment for said control means comprises the use of a central processor of the vehicle, for example, in case that said processor is incorporated in the ~~vehicles~~vehicle's production model, as it is more usual every day. In this embodiment, the control means comprises a man-machine interface to provide different parameters to the mentioned central processor of the vehicle, which is provided with an adapted program to control the supply current of the electrical heater through time as a function of the result of an analysis and processing of said parameters, which may come from, for example, one ~~eor~~or more detectors associated ~~to~~with the image acquisition unit and/or ~~to~~with other parts of the vehicle, and/or from an instructions and data input device at a vehicle's user disposal. Generally, these

parameters include, at least, the temperature in the interior of the casing of the image acquisition unit and the exterior ambient temperature, and can include, furthermore, the interior and exterior humidity and others.

Please replace the paragraph, beginning at page 4, line 3, with the following rewritten paragraph:

According to an embodiment, said electrical heater comprises at least an electrical resistance applied directly on said transparent element, advantageously in the form of an open ring of serigraphic resistive ink or paste on the internal face of said transparent element. The mentioned resistive ink or paste may be, for example, of the type including graphite, Cu, Ag or Cu-Ag. In case the resistive ink or paste is weldable, connection lines will be directly connected to the ends of said open ring of resistive ink or paste. When the resistive ink or paste is not weldable, a layer of weldable conductive ink or paste will be incorporated at least at the ends of said open ring of resistive ink or paste, in order to execute the connection of said wires. Advantageously, said layer of weldable conductive ink or paste will be, furthermore, be extended along one or more variable length sections of the open ring of resistive ink or paste, in order to reduce its resistance and, therefore, adjust the heating power to a requested value. In those cases in which it may be seen as necessary, the resistance may comprise a layer of a protective mask material applied on said resistive ink or paste and/or conductive ink or paste, with the aim of protecting the electrical resistance against saline mist, kester nich chamber, etc., according to standard tests executed in the automotive sector.

Please replace the paragraph, beginning at page 5, line 21, with the following rewritten paragraph:

Figs. 2 to 6 are ~~inferior~~interior ~~plant~~plan views of different variants of the transparent element with electrical heater of the unit of Fig. 1;

Please replace the paragraph, beginning at page 7, line 12, with the following rewritten paragraph:

According to another variant, said control means use a central processor of the vehicle, or on-board computer, associated with an man-machine interface to provide different parameters arising from one or more detectors associated to the image acquisition unit and/or to other parts of the vehicle, and/or from an input device at a vehicle's user disposal, to said

computer, in which an adapted program has been loaded to control said supply current of the electrical heater throughout time as a function of the result of an analysis and a processing of said parameters, covering typically at least the temperature inside the casing 1 of the image acquisition unit and the exterior ambient temperature.

Please replace the paragraph, beginning at page 9, line 32, with the following rewritten paragraph:

According to another embodiment, not shown, of the present invention, the heating means do not include an electric heater, but rather comprises at least one element of a good heat conductive material to transfer heat from a zone of the casing 1, where said electronic components of said image detection means 6 are located, to an adjacent zone to the transparent element 3, or close to it. Advantageously, said good heat conductive material is the same material the casing 1 is made of, which, if it is provided with a high enough heat transfer coefficient, is able to properly dissipate the heat generated by the electronic components and, at the same time, to transfer part of it to the zone of the casing 1 adjacent to the transparent element 3. To reach this aim, as appropriate materials for the manufacture of the casing 1, can be mentioned, for example, ~~ZAMMAK~~ZAMAK, aluminum and various thermally conductive plastics. Generally, even in the embodiments including an electrical heater, it turns out to be advantageously if the material of the casing 1 is provided with a high heat transfer coefficient.